## STUDIES IN THE MELYRIDÆ, NUMBER EIGHT BY FRANK E. BLAISDELL, SR.

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The very distinct species of *Trichochrous* described below belongs to Casey's second group of species. It is necessary to give a detailed description, as the increasing number of new forms makes it obligatory if the numerous species are to be recognized by description alone. Whenever possible, collectors should secure a moderate series of species in the locality where they are discovered, so as to determine the degree of individual variation. This is exceedingly essential so as to eliminate guesswork in the definition of species.

## Trichochrous quadrinotatus Blaisdell, new species

Form oblong, slightly oval. Color black, trophi slightly rufo-piceous, tarsi and distal half of tibiæ rufous to piceous. Surface more or less shining and without metallic luster.

Pubescence not dense nor coarse, moderately short, not completely recumbent and pale in color; brownish to blackish and somewhat coarser hairs form two more or less quadrate spots on each elytron, the subbasal macules most so, while the larger at apical third tend to diffuse both toward apex and anteriorly, connecting more or less narrowly or more broadly with the subbasal; occasionally the brownish hairs become more diffused and nearly replace the pale hairs. Hairs of the pronotal disk and head more or less brownish; on the deflexed sides of elytra, especially toward apex and on apical declivity, they become coarser and semi-erect; bristling erect setæ entirely absent. Lateral pronotal fimbriæ moderately short, regular and evenly close-set, pale to blackish in color; those of the elytra a little longer, quite even and more widely spaced, directed obliquely postero-laterad. Pubescence of undersurface of body fine, closely recumbent and more plumbeous in color; that of sternal side pieces a little coarser and more cinereous.

Head slightly transverse, in width about equal to the pronotal length and apical width, muzzle short; frons plane, surface very finely and microscopically reticulate, finely rugulose in clypeal region and there with a slight glabrous convexity, limited at times by feeble lateral depressions; punctures small, evenly and rather widely spaced, separated by a distance equal to two or three times their diameter. Eyes large, oval, evenly convex and prominent, rather finely faceted. Antennæ less than moderately stout, about as long as head and pronotum; third joint smallest, intermediate

joints slightly serrate anteriorly, outer four more rounded, gradually and evenly incrassate.

Pronotum transverse, widest at basal third or about middle, about a half wider than long and two and a half times longer than an eye, moderately and evenly convex from side to side; apex feebly and broadly arcuate in circular arc, apical angles rounded; sides moderately arcuate, straighter and more convergent before basal third, thence more strongly and more or less briefly sinuate before the small obtuse basal angles, margin finely crenulate; base broadly and moderately arcuate, slightly sinuate within the angles; disk more or less microscopically rugulose, more densely and strongly so in lateral fourth, punctures small in the central area, separated by a distance equal to one to three times their diameter.

Elytra oblong, about two-sevenths longer than wide, three times as long as pronotum and about a sixth wider; humeri broadly rounded, slightly prominent and somewhat tumid; sides parallel, feebly and very broadly sinuate behind humeri, thence feebly arcuate, becoming more evenly so to parabolically rounded apex; disk slightly convex on dorsum, becoming more strongly and declivously so laterally, very gradually declivous apically; punctures coarser than on pronotum and separated by a distance equal to one to three times their diameter, surface somewhat rugose, smoother and punctures smaller toward apex.

Undersurface of body very finely and more densely punctate. Legs moderate in length and slenderness; femora not stout, tarsi somewhat stout and about equal to their tibia in length, the latter quite as long as the femur, similar in the sexes.

Male. Pronotum more broadly arcuate at sides, widest about middle; antennæ slightly heavier; elytra rather more oblong and parallel; fifth ventral abdominal segment truncatosinuate at apex.

Female. Pronotum usually widest at basal third; elytra very slightly wider posteriorly; fifth ventral broadly but not strongly arcuate at apex.

Measurements. Length (types), 2.5-2.7 mm.; width, .9-1 mm. Largest female of the series measures length, 3 mm.; width, 1.2 mm.

Holotype, male (No. 2969), and allotype, female (No. 2970, Museum California Academy of Sciences), and paratypes in my collection; also in that of Mr. Warwick Benedict (Museum University of Kansas).

Type locality: Idylwild, Riverside County, California. A series of twenty-five specimens collected by Mr. Benedict on May 29, 1923.

In the series at hand the brown hairs of the upper surface at times by diffusion reduce the paler pubescence to a minority. In typical individuals the four dark areas on the elytra are distinctly quadrate with a minimum amount of diffusion.

Quadrinotatus is to follow vilis Casey in our lists. By the dark discal elytral macules it differs radically from other members of Casey's second group of species. At first sight it might be associated with insignis Casey and curticollis Casey on account of the elytral pattern, but those species have the body bristling with long erect setæ and belong to Casey's third group in which there is no regular close-set fimbriæ on lateral margins of pronotum.

## TRICHOCHROUS PUNCTIPENNIS Lec.

The type locality of this species is Santa Catalina Island off the coast of Los Angeles County. My own series was collected at Avalon on that island. Mr. Warwick Benedict of the Entomological Department of the University of Kansas has recently submitted to me for study a series of fourteen specimens, taken by him at Ensenada, Lower California. They were collected on July 19, 1924. This is the first record of the species having been taken on the mainland.

LISTRUS NIVEICANTHUS TINCTICORNIS Blais.

The type specimens of this subspecies were taken at Pasadena, California. A considerable series has very recently been sent me for examination that were collected at Warner's Hot Springs, San Diego County, by Mr. Benedict. The differential characters have been fully discussed by me in my paper published as one of the Stanford University publications, Univ. Series Biol. Sciences, Vol. I, No. 3, June 1921, p. 169.

## IN MEMORY OF MR. N. R. GUNN

In the death of Mr. Norman R. Gunn the San Francisco Butterfly Club has lost one of the most enthusiastic of its younger members. Mr. Gunn was born at Breckenridge, Minnesota, June 27, 1913. He was a student at the Berkeley High School and had planned to make entomology his life work, intending to carry on his entomological studies at the University of California. His death at Tacoma, Washington, on July 27, 1930, was due to a heart attack while in bathing. The heartfelt sympathy of his entomological associates is extended to the bereaved mother and relatives.—R. F. Sternitzky.